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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/859,671	05/17/2001	Woonhee Hwang	944-003.083	3352

4955 7590 06/30/2004

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EXAMINER

SMITH, SHEILA B

ART UNIT	PAPER NUMBER
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2681

DATE MAILED: 06/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/859,671

Applicant(s)

HWANG ET AL.

Examiner

Sheila B. Smith

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>16</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 2, 6, 7, 11-12, 16-17, are rejected under 35 U.S.C. 103(a) as being unpatentable over Salmine (U. S. Patent Number 6,463,286) in view of Riihinen et al. (U.S. Patent Application Number 2002/0072363).

Regarding claims 1, 6, 11, 16, Salmine essentially discloses all of the claimed invention as set forth in the instant application, additionally Salmine discloses a method, exchange, telecommunication system and mobile station for temporary selective national roaming at predetermined network operation conditions in a mobile radio communication system, Salmine further discloses a method comprising the steps of sharing load information between network controllers connected to determining in a first a system switching means (HPLMN), that a certain load condition exists (which reads on overload message) signaling the second system switching means (VPLMN1) that certain load condition exists using a measurement report (which reads on "information provided to let the network know that it has free capacity to handle additional mobile stations at the time of receiving the request message" in column 16 lines 30-33) and in addition, a proposed action (which reads on "granting access to one or more mobile stations MS1-MS4" in column 16 lines 29-31) using an information element indicative (which reads on "information provided to let the network know that it has free capacity to handle

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additional mobile stations at the time of receiving the request message” and “granting access to one or more mobile stations MS1-MS4”) thereof as exhibited in figure 4 and disclosed in column 16 lines 29-45. However Salmine fails to specifically disclose (a) to a core network by a first standard interface (IU) and to each other by a second standard interface (IUR) used for facilitating a macrodiversity function where data is sent via multiple Node Bs to a user equipment, radio network controllers for operating in an environment, and (b) an environment where data is sent via at least one of multiple Node Bs connected to the first radio network controller and via at least one of multiple Node Bs connected to a second radio network controller.

(a) In the same field of endeavor, Riihinen et al. discloses a control node handover in radio access network. Riihinen et al. discloses a core network (16) by a first standard interface (IU) and to each other by a second standard interface (IUR) used for facilitating a macrodiversity function where data is sent via multiple Node Bs (28) to a user equipment (30), radio network controllers (26) for operating in an environment (which reads on page 1 paragraph [0009] and [0035]).

(b) Riihinen et al. further discloses an environment where data is sent via at least one of multiple Node Bs (28) connected to the first radio network controller (26₁) and via at least one of multiple Node Bs (28) connected to a second radio network controller (26₂) (which reads on page 3 paragraph [0036]).

Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify Salmine with (a) to a core network by a first standard interface (IU) and to each other by a second standard interface (IUR) used for facilitating a macrodiversity function where data is sent via multiple Node Bs to a user equipment, radio network controllers for

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operating in an environment, and (b) a in environment where data is sent via at least one of multiple Node Bs connected to the first radio network controller and via at least one of multiple Node Bs connected to a second radio network controller as taught by Riihinen et al. for the purpose of properly balancing the load between 2 network controllers.

Regarding claims 2, 7,12,17, Salmine discloses everything claimed, as applied above (see claim 1) additionally, Salmine discloses action is to restrict data flow as disclosed in column 16 lines 29-30.

2. Claims 3-5,8-10,13-15,18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salmine in view of Riihinen et al. and further in view of Frodigh et al. (U.S. Patent Number 6381458).

Regarding claims 3,4,8,9,13,14,18,19, Salmine in view of Riihinen et al. discloses everything claimed, as applied above (see claim 1) however the combination of Salmine in view of Riihinen et al. fails to specifically disclose interfrequency and intersystem handover.

In the same field of endeavor, Frodigh et al. discloses a method and system for soft handoff control based on access network capacity. Frodigh et al. discloses inter frequency and intersystem handover in column 2 lines 41-45 and 7 lines 33-36

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to improve the combination of Salmine in view of Riihinen et al. by specifically providing for a inter frequency and intersystem handover as taught by Frodigh et al. for the purpose of stopping a system caused by the overload.

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Regarding claims 5,10,15,20, Salmine in view of Riihinen et al. disclose everything claimed, as applied above (see claim 1) additionally, Salmine discloses action to release a radio bearer (which reads on stop message as disclosed in column 5 lines 40-44).

3. Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riihinen et al. (U.S. Patent Application Number 2002/0072363) view of Salmine (U. S. Patent Number 6,463,286).

Regarding claims 21 - 23, Riihine et al. disclose everything claimed, as set forth in the instant application, additionally Riihine et al. further disclose a method for sharing load information between radio network controllers(26₁, 26₂) connected to each other by a first interface (Iur) and to a same core network (CNN)by a second interface (Iu) and for operating in an environment where the radio network controllers are from a same vendor or from different vendors comprising the steps of determining in a first radio network controllers(26₁), that a certain load condition exists (which reads on a “new connection would result in an overload”) signaling the second radio network controllers(26₂) over first standard interface (which reads on page 4 paragraph [0042]. However Riihine et al. fails to specifically disclose (a) that certain load condition exists using a measurement report and in addition, (b) a proposed action using an information element indicative thereof.

In the same field of endeavor Salmine discloses (a) that certain load condition exists using a measurement report (which reads on “information provided to let the network know that it has free capacity to handle additional mobile stations at the time of receiving the request message” in column 16 lines 30-33) and (b), a proposed action (which reads on “granting access

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to one or more mobile stations MS1-MS4” in column 16 lines 29-31) using an information element indicative (which reads on “information provided to let the network know that it has free capacity to handle additional mobile stations at the time of receiving the request message” and “granting access to one or more mobile stations MS1-MS4”) thereof as exhibited in figure 4 and disclosed in column 16 lines 29-45.

Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify Riihine et al. with (a) that certain load condition exists using a measurement report and in addition, and (b) a proposed action using an information element as disclosed by Salmine for the purpose of properly balancing the load between two network controllers.

Response to Arguments

Applicant's arguments, see paper 18, filed 4/15/2002, with respect to the rejection(s) of claim(s) 1-24 under 35 U.S.C. 103(a) as being unpatentable over Salmine (U. S. Patent Number 6,463,286) in view of Riihinen et al. (U.S. Patent Application Number 2002/0072363) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Riihinen et al. was used to disclose a core network by a first standard interface (IU) and to each other by a second standard interface.

Regarding applicant's arguments concerning Riihinen et al. not teaching RNC's sharing load information, the examiner disagrees, the applicant is directed to page 4 paragraph (0042) this clearly teaches this limitation.

5. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the

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applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheila B. Smith whose telephone number is (703)305-0104. The examiner can normally be reached on Monday-Thursday 6:00 am - 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Erika Gary can be reached on 703-308-0123. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S. Smith *S. Smith*
June 28, 2004

Erika Gary
ERIKA GARY
PATENT EXAMINER